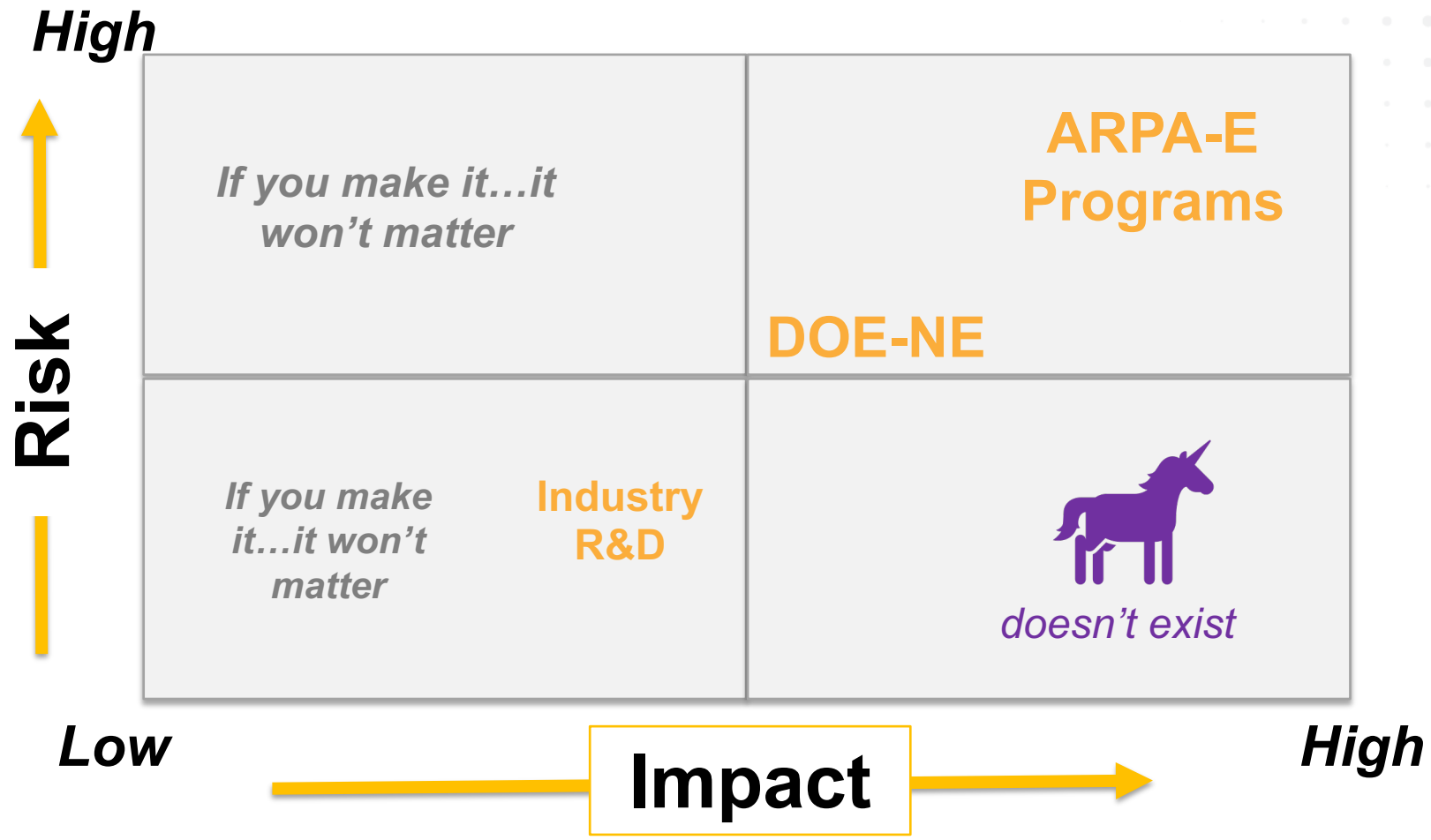
CHANGING WHAT'S POSSIBLE

Breakout 2: Setting Priorities

(Second Verse, Same as the First)

Overall Goal of Breakouts: Fill in the Map



What to Talk About

- What testing and validation needs to be done first? What is hardest and what is easiest? Does solving one problem enable solving many? How ubiquitous are these needs across reactor types?
- What sensors needs to be developed first -- or -- what combinations of existing signals should we focus on first? What is hardest and what is easiest? Does solving one problem enable solving many? How ubiquitous are these needs across reactor types?
- What should we prioritize for implementing APM? What is hardest and what is easiest? Does solving one problem enable solving many? How ubiquitous are these needs across reactor types?
- What things need to be autonomous or automatic first? What is hardest and what is easiest? Does solving one problem enable solving many? How ubiquitous are these needs across reactor types?

Key Focus Questions

Testing: Should we focus on really good simulators or generating experimental data? Why?

Sensors: For which parameter(s) would measuring it better make the biggest difference?

APM: For APM in advanced nuclear reactors, where should we start? In other words, which first step(s) would be logical?

Autonomy: What would be the single biggest-impact thing to automate / make autonomous in an advanced nuclear reactor?

Some Additional Thoughts

- We have a bunch of non-nuclear test loops with different types of coolants
  - That we can use to conduct all kinds of tests
  - And could be sensor testing platforms

- Think about the potential for ongoing improvement
  - How will we incorporate learning?
  - How will be able to incorporate new technology as it develops?

Some Additional Thoughts

RULE: No one is allowed to say "we can't do that because of regulations"

Now What?

- Check breakouts assignment list for which room to go to this time
- An ARPA-E facilitator will lead the discussion. Please be respectful and give everyone a chance to contribute.
- Take a 15 minute break to refresh, then head to your breakout room to **start discussions at 3:25 pm**